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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,714	02/28/2002	Eberhard Kinkelin	25045-12	1740

7590 10/08/2004

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EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/085,714	Applicant(s) KINKELIN ET AL.	
	Examiner John L. Goff	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/9/04 has been entered. In view of applicants amendment and arguments the rejections using Frankosky (WO 91/09166) as the primary reference are withdrawn.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. Claims 4-6 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 10 recites the limitation "said copolyetherester" in line 10. There is insufficient antecedent basis for this limitation in the claim. It is suggested to insert - - copolyetherester - - after "between a" in line 1 to overcome the rejection.

Claim Rejections - 35 USC § 103

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn (U.S. Patent 5,447,783) in view of any one of Tanaka et al. (U.S. Patent 4,130,603), Frankosky (WO 91/09166), or the admitted prior art (Specification pages 1-3) and either one of Mahler (U.S. Patent 5,418,044) or the admitted prior art.

Horn discloses a method of forming a multilayer textile laminate comprising providing a coextruded hydrophilic copolyetherester film (analogous to claimed film (C)) formed from terephthalic acid and a combination of diols selected from for example butanediol, diethylene glycol, triethylene glycol, polyethylene glycol, etc.) and a hydrophobic copolyetherester film (analogous to claimed film (A)) laminate and bonding the hydrophilic side of the laminate to a polyester fabric (analogous to claimed fabric (B)) using conventional laminating adhesives (analogous to claimed adhesive (D)) to form a bonded composite having an improved ability to avoid delamination (Column 1, lines 6-49 and 56-58 and Column 2, lines 32-34 and 46-51 and Column 3, lines 4-7 and 43-48 and Column 4, lines 17-30 and Column 5, lines 39-49 and 46-49 and Column 6, lines 6-12 and Column 7, lines 30-40 and 54-64 and Column 9, lines 45-58 and

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Column 10, lines 8-17 and the Examples). Horn is silent as to a particular conventional adhesive for laminating the copolyetherester multilayer to the polyester fabric. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the conventional laminating adhesive taught by Horn any of the well known and conventional adhesives for laminating polyester layers (including their application methods) to form textile products such as the copolyester hot melt adhesives suggested by any of Tanaka et al., Frankosky, or the admitted prior art to form a strong, delamination resistant bond.

It is noted Horn uses as the hydrophobic copolyetherester film one having the same long chain and short chain units as those claimed. However, while the film is analogous to Sympatex, i.e. the claimed film, it is unclear if the composition of Sympatex is specifically disclosed by Horn. In any event, one of ordinary skill in the art at the time the invention was made would have readily appreciated using as the hydrophobic copolyetherester film taught by Horn any of the well known and conventional films in the art having the same disclosed long chain and short chain units such as Sympatex as suggested by Mahler or the admitted prior art as only the expected results would be achieved, i.e. Horn, Mahler, and the admitted prior art are all directed to forming polyester textile articles having a hydrophobic copolyetherester layer.

Regarding the claimed film (C), the hydrophilic copolyetherester film taught by Horn is analogous to film (C), and the hydrophilic copolyetherester film taught by Horn is a hot melt having a melting point greater than 120 °C and may comprise only terephthalic acid and a combination of diols selected from the group consisting of butanediol, diethylene glycol, triethylene glycol, and polyethylene glycol such that the limitations required for film (C) in the

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claims are disclosed by Horn (Column 5, lines 39-49 and Column 6, lines 6-12 and Column 7, lines 54-64).

Regarding claim 4, Horn does not specifically recite using as the polyester fabric one that is non-woven, knitted, or a lining. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the polyester fabric taught by Horn any of the well known and conventional polyester fabrics used in the art for making polyester textile articles such as non-woven, knitted, lining, etc. as suggested by either one of the admitted prior art or Mahler as only the expected results would be achieved.

Tanaka et al. disclose a hotmelt copolyester adhesive useful for bonding together polyester layers in textile articles to give the textile articles improved resistance to delamination. Tanaka et al. teach the adhesive is applied by techniques such as dotting or scattering (Column 1, lines 7-14, 38-43, and 57-61 and Column 2, lines 8-11 and 28-32 and Column 3, lines 49-53).

Frankosky discloses a method of bonding a hydrophilic copolyetherester film to a polyester batt (i.e. fabric) lining using a conventional hotmelt copolyester adhesive wherein the bonded composite has an improved ability to avoid delamination. (Page 2, lines 35-38 and Page 3, lines 1-40 and Page 4, lines 1-40 and Page 5, lines 1-20 and Examples 1-4).

The admitted prior art discloses it is known to bond a hydrophobic copolyetherester film (such as Sympatex a film formed of the same long and short chain units as the hydrophobic copolyetherester film taught by Horn and having the same characteristics as those disclosed in claim 10) to a polyester fabric or interlining using a polyester or copolyester based hot melt adhesive. The admitted prior art teaches the adhesive is applied by any of the known methods

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such as scatter coating, double dot coating, paste coating, or paste-dot coating (Paragraphs 4, 7, and 10).

Mahler discloses a hydrophobic copolyetherester film, e.g. a Sympatex film, formed of the same long chain and short chain units as the hydrophobic copolyetherester film taught by Horn that has the same characteristics as those disclosed in claim 10 wherein the film is bonded to polyester fabric (e.g. woven or knitted) to form textile articles (Column 1, lines 13-15 and Column 4, lines 49-68 and Column 5, lines 1-19).

7. Claims 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Horn.

The admitted prior art discloses it is known to bond a hydrophobic copolyetherester film (such as Sympatex) to a polyester interlining fabric using a polyester or copolyester based hot melt adhesive. The admitted prior art teaches the adhesive is applied by any of the known methods such as scatter coating, double dot coating, past coating, or paste-dot coating. However, the admitted prior art teaches that these laminates are not resistant to multiple washings (Paragraphs 4, 7, and 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the copolyetherester film taught by the admitted prior art a multilayer film comprising a hydrophilic copolyetherester layer and a hydrophobic copolyetherester layer as it was well known in the art to include in addition to the hydrophobic copolyetherester layer a hydrophilic copolyetherester layer as shown for example by Horn (See above for a full description of Horn) to form a laminate with a better resistance to delamination.

Response to Arguments

8. Applicant's arguments with respect to claims 4-6 and 10 have been considered but are moot in view of the new ground(s) of rejection. Applicants argue none of the references disclose a layer that is waterproof and water vapor permeable, a layer made of hot melt adhesive on basis of hydrophilic copolyetherester, or a woven, non-woven fabric or knitted fabric as the substrate layer. The hydrophilic copolyetherester film taught by Horn is a layer made of hot melt adhesive on basis of hydrophilic copolyetherester. The hydrophobic copolyetherester film taught by Horn is a layer that is waterproof and water vapor permeable, and the admitted prior art and Mahler are applied to show woven, non-woven fabric or knitted fabric as the substrate layer. Regarding applicants arguments to Mahler, it is noted Mahler is cited only to show conventional hot melt adhesives and substrate layers used in polyester textile articles. Applicants further argue the combination of Horn in view of either one of Tanaka or Frankosky in that both references teach significant amount of isophthalic acid in the formulation. The claims are not commensurate in scope with this argument. Tanaka and Frankosky are applied with Horn merely as examples of conventional adhesives that would be used to bond the hydrophilic copolyetherester film to the polyester fabric, i.e. adhesives analogous to claimed adhesive (D), and adhesive (D) as claimed does not exclude isophthalic acid from the formulation. It is noted isophthalic acid is only excluded from the hydrophilic copolyetherester film which is the claimed film (C), and Horn clearly teaches the hydrophilic copolyetherester film may consist of only terephthalic acid and diols selected from the group consisting of butanediol, diethylene glycol, triethylene glycol, and polyethylene glycol (Column 5, lines 39-49 and Column 6, lines 6-12 and Column 7, lines 54-64).

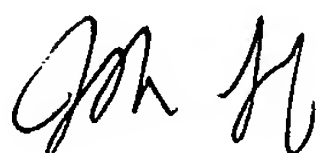
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Conclusion

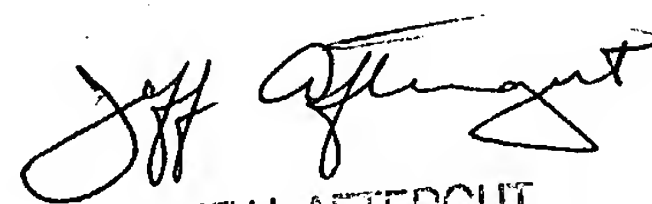
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **(571) 272-1216**. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L. Goff



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